Optics and Lasers in Engineering **15** (1991) 371–373

CONTENTS OF VOLUME 15

Number 1

Computer Controlled Selection of Small Industrial Components using Laser Scatter 1
S. M. BROWN & R. J. DEWHURST (UK)

Fringes of Equal Chromatic Low Orders 17
M. MEDHAT (Egypt)

Interferometric Measurements of Objects in Water by TV-Holography 25
JAN T. MALMO, OLE J. LØKBERG & SVEIN ELLINGSRUD (Norway)

Application of ESPI to Three-Dimensional Vibration Measurements 43
M. C. SHELLABEAR & J. R. TYRER (UK)

Theoretical Determination of Temperature Distributions for Non-destructive Depth Profiling of Opaque Solids 57
BAKI KOYUNCU (Kuwait)

Book Reviews 69

Announcements 75

Number 2

Automated Fringe Analysis Techniques in Japan 79
TOYOHIKO YATAGAI (Japan)

Three-Mirror, Four-Beam Moiré Interferometer and its Capabilities 93
ROBERT CZARNEK (USA)

Slope and Contour Measurement by the Reflection Grating Method and the Photogrammetric Principle 103
R. RITTER & W. WILKE (FRG)

A Novel Detection Scheme for Vibration Monitoring using Optical Techniques . 115
Y. N. NING, K. T. V. GRATTAN, A. W. PALMER & B. T. MEGGITT (UK)

On-Line Automated Phase-Measuring Profilometry 127
MING CHANG & DER-SHEN WAN (Taiwan)

Book Reviews 141

Announcements 145

Optics and Lasers in Engineering (**15**) (1991)—© 1991 Elsevier Science Publishers Ltd, England. Printed in Northern Ireland

Number 3

Second-order Phenomena in Strain Measurement by Speckle Techniques 149
M. KEINAN & J. POLITCH (Israel)

Measurement of the Corrosion Rate of Aluminium in Sodium Hydroxide Using Holographic Interferometry 183
M. R. SAJAN, T. S. RADHA, B. S. RAMPRASAD & E. S. R. GOPAL (India)

Effect of Specimen Curvature in Moiré Interferometry for Out-of-Plane Displacement Measurement 189
A. ASUNDI (Hong Kong)

An Optical Lever for Measuring Very Small Rotational Oscillations (Reseach Note) 197
PAUL LORRAIN (Canada)

Radius of Curvature Measurement by Twyman–Green's Interferometer (Research Note) 203
S. Y. EL-ZAIAT, L. MISSOTTEN & J. ENGELEN (Belgium)

Book Review 209

Announcements 211

Number 4

Transient Thermal Stresses of Two Near-edge Defects Due to a Moving Heat Source 215
WEI-CHUNG WANG & WEN-MING WU (Taiwan)

Adaptive Filter for Enhancement of Fringe Patterns 241
HUANG ZHI & ROLF B. JOHANSSON (Sweden)

Determination of Dynamic Three-dimensional Displacement Fields on a Shell Surface 253
TONG JINGWEI, WANG SHIBIN & LI HONGQI (People's Republic of China)

Using Attenuated Total Internal Reflection for Holographic Investigation of Surface Relief 267
S. SAINOV & D. TONTCHEV (Bulgaria)

Laser Cleaning of Glass (Research Note) 275
MASAHIRO UEDA, RYOYA MAKINO, KI-ICHIRO KAGAWA & BUN-ICHI NISHIYAMA (Japan)

Book Reviews 279

Announcements 287

Calendar 291

Number 5

Special Issue on Computer Optics in the USSR

Guest Editorial 293

Infra-red Radiation Focusators 297
M. A. GOLUB, I. N. SISAKYAN & V. A. SOIFER (USSR)

Focusators for Laser-Branding 311
L. L. DOSKOLOVICH, N. L. KAZANSKIY, S. I. KHARITONOV & G. V. USPLENIEV (USSR)

Iterative Computing of Transmittance of Optical Elements Focusing at a Predetermined Area 323
V. V. KOTLYAR & I. V. NIKOLSKY (USSR)

Computer-Generated Holographic Optical Elements Produced by Photolithography 331
A. E. BEREZNY, S. V. KARPEEV & G. V. USPLENIEV (USSR)

Mode Selection of Laser Radiation by Computer-Generated Optical Elements . 341
M. A. GOLUB, I. N. SISAKYAN & V. A. SOIFER (USSR)

Holographic-Interferometry Methods Employed for Vibration-Strength Testing of Aviation-Engine Workpieces 357
D. S. ELENEVSKY, N. I. KRAINYUKOV, YU. N. SHAPOSHNIKOV & A. G. KHRAMOV (USSR)

Calendar 369